

## ABSTRACT

Pre-distortion compensation circuits (11, 12) are disposed at stages previous to carrier amplifier 13 and peak amplifier 14, respectively. Pre-distortion compensation circuit (11) has such characteristics that compensate  
5 carrier amplifier (13) for a distortion characteristically produced on the operation thereof, particularly, an amplitude-phase (AM-PM) distortion, while pre-distortion compensation circuit (12) has such characteristics that compensate peak amplifier (14) for a distortion characteristically produced on the operation thereof, particularly, an AM-PM distortion. Thus, the Doherty  
10 amplifier is also compensated for its own AM-PM distortion characteristic to accomplish a low distortion characteristic and implement an ideal power combining operation thereof.